

	Safety Measure	BCA Provisions for Determining Standard of Performance	Nature of Inspection or Test Frequency
<b>Table I1.1 - ESSENTIAL SAFETY MEASURES - BUILDING FIRE INTEGRITY</b>			
	Building elements required to satisfy prescribed fire resistance levels	BCA Section C D1.12	Annual Inspection for damage, deterioration, or unauthorised alteration
	Materials and assemblies required to have fire hazard properties	C1.10	Annual Inspection for damage, deterioration, or unauthorised alteration
	Elements required to be non-combustible, provide fire protection, compartmentation and separation	C2.5 to C2.14, C3.3, C3.11, D1.7, D1.8, E1.3, G3.4	Annual Inspection for damage, deterioration, or unauthorised alteration
	Wall wetting sprinklers (including doors and windows required in conjunction with wall wetting sprinklers)	C3.4, C3.8, C3.11, D1.7, D1.8, G3.8	As per AS 1851-2005 Section 2 if Sprinkler system installed or every 6 months to ensure compliance, no damage or deterioration and water supply availability.
	Fire Doors (including sliding fire doors and their associated warning systems) and associated self-closing, automatic closing and latching mechanisms	C2.12, C2.13, C3.4 to C3.8, C3.10, C3.11, D1.7, D1.8, D1.12	Every 3 months as per AS 1851 – 2005 Section 17 check operation of handles, closers and electronic strikes
	Fire windows (including windows that are automatic or permanently fixed in position)	C3.4, C3.8, C3.11, D1.7, D1.8	Every 6 months as per AS 1851 – 2005 section 17 for damage, deterioration, or unauthorised alteration (BCA refer Appendix E)
	Fire shutters	C3.4, C3.5, D1.7, D1.8	Every 3 months as per AS 1851 – 2005 section 17, Annual Inspection for damage, deterioration, or unauthorised alteration
	Solid core doors and associated self-closing, automatic closing and latching mechanisms	C3.11	Annual Inspection for damage, deterioration, and check operation of closers, handles and electronic strikes.
	Fire protection at service penetrations through elements required to be fire resisting or have a resistance to the incipient spread of fire	C3.12, C3.13, C3.15	Every 6 months as per AS 1851 – 2005 Inspection for damage, deterioration, or unauthorised alteration
	Fire protection associated with construction joints, spaces and the like in and between building elements required to be fire resisting	C3.16	Every 6 months as per AS 1851 – 2005 Inspection for damage, deterioration, or unauthorised alteration
	Smoke doors and associated self-closing, automatic closing and latching mechanisms	Spec C2.5, D2.6	Every 3 months as per AS 1851 – 2005 Check operation of closers, handles and electronic strikes
	Proscenium walls (including proscenium curtains)	H1.3	Annual Inspection for damage, deterioration, or unauthorised alteration
<b>Table I1.2 - ESSENTIAL SAFETY MEASURES - MEANS OF EGRESS</b>			
✓	Paths of travel to exits	D1.6	Inspection every 3 months to ensure there are no obstructions and no alterations
	Discharge from exits (including paths of travel from open spaces to public roads)	D1.7, D1.9-D1.11, D2.12, G4.3, G4.6, G4.7	Inspection every 3 months to ensure there are no obstructions and no alterations
	Exits (including fire isolated stairways and ramps, stair treads, balustrades and handrails associated with exits and fire isolated passageways)	D2.2, D2.3, D2.8-D2.11, D2.13, D2.16, D2.17	Inspection every 3 months to ensure there are no obstructions and no alterations
	Smoke lobbies to fire isolated exits	D1.7, D2.6	Annual Inspection for damage, deterioration, or unauthorised alteration

	Open access ramps or balconies for fire isolated exits	D2.19 – D2.23	Annual Inspection for damage, deterioration, or unauthorised alteration
	Doors (other than fire or smoke doors) in a required exit, forming part of a required exit or in a path of travel to a required exit and associated self-closing, automatic closing and latching mechanisms.	D1.6, D2.19 – D2.21, D2.23	Inspection every 3 months to ensure doors are intact, operational and fitted with conforming hardware
<b>Table I1.3 - ESSENTIAL SAFETY MEASURES - SIGNS</b>			
	Exit signs (including direction signs)	Specification D1.12, E4.5, E4.6, E4.8	Every six months to AS2293.2- 1995
	Signs warning against the use of lifts in the event of fire	E3.3	Annual Inspection to ensure the warning sign is in place and legible
	Warning signs on sliding fire doors and doors to non-required stairways, ramps and escalators	C3.6, Specification D1.12	Annual Inspection to ensure the warning sign is in place and legible
	Signs, intercommunication systems, or alarm systems on doors of fire isolated exits stating that re-entry to a storey is available	D2.22	Annual Inspection to ensure the warning sign is in place and legible
	Signs alerting persons that operation of doors must not be impaired	D2.23	Annual Inspection to ensure the warning sign is in place and legible
	Fire order notices required in alpine areas	G4.9	Annual Inspection to ensure the warning sign is in place and legible
<b>Table I1.4 - ESSENTIAL SAFETY MEASURES - LIGHTING</b>			
	Emergency Lighting	E4.2, E4.4	Every 6 months to AS 2293.2-1995
<b>Table I1.5 - ESSENTIAL SAFETY MEASURES - FIRE FIGHTING SERVICES AND EQUIPMENT</b>			
	Fire hydrant system (including on-site pump set and fire-service booster connection)	E1.3, AS 2419.1	Weekly to AS 1851 – 2005 Section 4 where pumps are installed or 6 monthly to AS 1851 – 2005 section 4
	Fire hose reel system	E1.4, AS 2441	Every six months to AS 1851 – 2005 section 14
	Fire sprinkler system	E1.5, G3.8, H1.2, AS 2118.1	Weekly to AS 1851 – 2005 section 2
	Portable fire extinguishers	E1.6, AS 2444	Every six months to AS 1851 – 2005 section 15.4
	Fire control centres (or rooms)	E1.8	Annual inspection to ensure compliance of construction and contents with BCA
	Provisions for special hazards	E1.10	Inspection regime to be developed in consultation with designer utilizing appropriate Australian standards, manufacturer specifications, etc

<b>Table I1.6 - ESSENTIAL SAFETY MEASURES – AIR HANDLING SYSTEMS</b>			
	Smoke hazard management systems: <ul style="list-style-type: none"> <li>➤ Automatic air pressurization for fire isolated exits</li> <li>➤ Zone smoke control system</li> <li>➤ Automatic smoke exhaust system</li> <li>➤ Automatic smoke and heat vents</li> <li>➤ Air handling systems (which may contribute to smoke spread)</li> <li>➤ Miscellaneous air handling systems covered by sections 5 and 11 of AS/NZS 1668.1 serving more than one fire compartment</li> <li>➤ Carpark mechanical ventilation system</li> </ul>	E2.2  F4.11	Quarterly and as prescribed in AS 1851 – 2005 section 18  Frequency as nominated by manufacturer on label attached to equipment in accordance with AS 1851 – 2005 Section 18
	Atrium smoke control system	Specification G3.8	As per AS 1851 – 2005 Sect 18
<b>Table I1.7 - ESSENTIAL SAFETY MEASURES - AUTOMATIC FIRE DETECTION AND ALARM SYSTEMS</b>			
	Smoke and heat alarm system	Clause 3 of specification E2.2a, AS 3786	As prescribed in AS 1851 – 2005 Section 7 Monthly inspection to test operation, replace battery or unit as necessary
	Smoke and heat detection system	Clause 4 of specification E2.2, AS 1670.1	Monthly as prescribed in AS 1851 – 2005 Section 6
	Atrium fire detection and alarm systems	Clause 4 of specification G3.4, AS 1670.1	Monthly as prescribed in AS 1851 – 2005 Section 6
<b>Table I1.8 - ESSENTIAL SAFETY MEASURES - OCCUPANT WARNING SYSTEMS</b>			
	Emergency warning and intercommunication system	E4.9, Clause 6 of specification G3.8	Monthly to AS 1851 – 2005 Section 10
	Building occupant warning system	Clause 8 of specification E1.5, Clause 6 of specification E2.2a	Monthly to AS 1851 – 2005 Section 9
<b>Table I1.9 - ESSENTIAL SAFETY MEASURES - LIFTS</b>			
	Stretcher facility in lifts	E3.2	Annual inspection to ensure compliance of facilities with BCA
	Emergency lifts	E3.4	As per requirements of AS 1735. Periodic inspection as per manufacturers specification, however no less than annual inspection.
	Passenger lift fire service controls	E3.7	Periodic inspection as per manufacturers specifications however no less than annual inspection
<b>Table I1.10 - ESSENTIAL SAFETY MEASURES – STANDBY POWER SUPPLY SYSTEMS</b>			
	Standby power supply systems	E3.4 Clause 6 of specification G3.8	Every 6 months test to ensure auxiliary power is operable. For diesel engines- test as prescribed in AS 1851 - 2005 based on proving electrical load in lieu of flow/pressure for pump sets
<b>Table I1.11 - ESSENTIAL SAFETY MEASURES – BUILDING CLEARANCE AND FIRE APPLIANCES</b>			
	Open space around large isolated buildings	C2.3, C2.4	Annual inspection to ensure that unobstructed access to buildings and fire fighting facilities are maintained
	Vehicular access around large isolated buildings	C2.3, C2.4	Annual inspection to ensure clearance is maintained
<b>Table I1.12 - ESSENTIAL SAFETY MEASURES – OTHER MEASURES</b>			
	Glazed assemblies	B1.4, F1.13	Annual Inspection
	Balconies	Part B1	Annual Inspection
	Balustrades	Part B1, D2.16	Annual Inspection



	Swimming Pool Fencing	G1.1	Annual Inspection
	Bushfire protection measures	G5.2	Annual Inspection
	Refrigerated chambers, strong rooms and vaults	G1.2	Annual Inspection
<b>Table I1.13 - ESSENTIAL SAFETY MEASURES – BUILDING USE AND APPLICATION</b>			
	Classification and use of the building	A3.2-A3.4	Annual Inspection
	Occupancy Hazard	E1.5, E1.6, E1.10	Annual Inspection
<b>I1.2 ESSENTIAL SAFETY MEASURES – MECHANICAL VENTILATION</b>			
	Mechanical ventilation or hot water or warm water or cooling water systems	I1.2	Monthly to AS 3666.2 - 2002

### WHAT YOU AS THE OWNER NEED TO KNOW ABOUT ESSENTIAL SAFETY MEASURES

#### How is compliance achieved?

Compliance is achieved by consideration and assessment of the testing documentation and installation in accordance with the relevant ESM maintenance Australian Standard. Procedures are reviewed and scrutinised for all testing undertaken through the previous 12 months. This is certified annually as an Annual Essential Safety Measures report issued by the owner or agent on behalf of the owner.

#### Who determines what to maintain?

Maintenance is determined from the issue of a maintenance schedule/ statement issued on completion of new building works for an Occupancy Permit or Certificate of Final Inspection. For buildings constructed prior to the introduction of this requirement a maintenance determination can be issued by your local council or private Building Surveyor/Certifier.

#### How is compliance enforced?

The maintenance requirements for ESM are administered under each state’s respective acts and regulations. This legislation requires that the ESM installed into a building are maintained routinely by the building owner (to the relevant Australian Standard), reviewed annually and certified in the prescribed format. Penalties apply for failure to comply with the above ranging from \$10,000 for individuals to \$100,000.00 for companies and jail terms apply in some instances.

#### How can JBG Building Surveying help?

JBG is capable of creating the maintenance determination, issuing the Annual Essential Safety Measures report and liaising with council on all aspects of maintenance of Essential Safety Compliance and the BCA.